

STATEMENT UNDER 37 CFR 3.73(b)Applicant/Patent Owner: QUALCOMM IncorporatedApplication No./Patent No.: 10/820,440 Filed/Issue Date: 4/5/2004Entitled: Modified Preamble Structure for IEEE 802.11aQUALCOMM Incorporated, a

(Name of Assignee)

Delaware Corporation

(Type of Assignee, e.g., corporation, partnership, university, government agency, etc.)

states that it is:

1. ☒ the assignee of the entire right, title, and interest; or
2. ☐ an assignee of less than the entire right, title and interest
(The extent (by percentage) of its ownership interest is _____ %)

in the patent application/patent identified above by virtue of either:

- A. ☐ An assignment from the inventor(s) of the patent application/patent identified above. The assignment was recorded in the United States Patent and Trademark Office at Reel _____, Frame _____, or for which a copy thereof is attached.

OR

- B. ☒ A chain of title from the inventor(s), of the patent application/patent identified above, to the current assignee as follows:

1. From: AIRGO NETWORKS To: QUALCOMM Incorporated

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☐ Additional documents in the chain of title are listed on a supplemental sheet.

☒ As required by 37 CFR 3.73(b)(1)(i), the documentary evidence of the chain of title from the original owner to the assignee was, or concurrently is being, submitted for recordation pursuant to 37 CFR 3.11.

[NOTE: A separate copy (i.e., a true copy of the original assignment document(s)) must be submitted to Assignment Division in accordance with 37 CFR Part 3, to record the assignment in the records of the USPTO. See MPEP 302.08]

The undersigned (whose title is supplied below) is authorized to act on behalf of the assignee.



Signature

October 19, 2007

Date

Ross Franks

Printed or Typed Name

(858) 845-1946

Telephone Number

Patent Counsel, QUALCOMM Incorporated

Title

This collection of information is required by 37 CFR 3.73(b). The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11 and 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

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QUALCOMM INCORPORATED COMPANY: 5775 MOREHOUSE DRIVE



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FEBRUARY 26, 2007

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PATENT DEPARTMENT
SAN DIEGO, CA 92121UNITED STATES PATENT AND TRADEMARK OFFICE
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PLEASE REVIEW ALL INFORMATION CONTAINED ON THIS NOTICE. THE INFORMATION CONTAINED ON THIS RECORDATION NOTICE REFLECTS THE DATA PRESENT IN THE PATENT AND TRADEMARK ASSIGNMENT SYSTEM. IF YOU SHOULD FIND ANY ERRORS OR HAVE QUESTIONS CONCERNING THIS NOTICE, YOU MAY CONTACT THE EMPLOYEE WHOSE NAME APPEARS ON THIS NOTICE AT 571-272-3350. PLEASE SEND REQUEST FOR CORRECTION TO: U.S. PATENT AND TRADEMARK OFFICE, MAIL STOP: ASSIGNMENT SERVICES BRANCH, P.O. BOX 1450, ALEXANDRIA, VA 22313.

RECORDATION DATE: 02/26/2007

REEL/FRAME: 018932/0566
NUMBER OF PAGES: 10

BRIEF: MERGER (SEE DOCUMENT FOR DETAILS).

ASSIGNOR:

AIRGO NETWORKS, INC.

DOC DATE: 02/26/2007

ASSIGNEE:

QUALCOMM INCORPORATED
5775 MOREHOUSE DRIVE
PATENT DEPARTMENT
SAN DIEGO, CALIFORNIA 92121

SERIAL NUMBER: 10068571

FILING DATE: 02/05/2002

PATENT NUMBER:

ISSUE DATE:

TITLE: SYSTEM FOR SOFT SYMBOL DECODING WITH MIMO LOG-MAP DETECTION

SERIAL NUMBER: 10376060

FILING DATE: 02/26/2003

PATENT NUMBER:

ISSUE DATE:

TITLE: SYSTEM FOR SOFT SYMBOL DECODING WITH MIMO LOG-MAP DETECTION

018932/0566 PAGE 2

SERIAL NUMBER: 10823087 FILING DATE: 04/12/2004
PATENT NUMBER: ISSUE DATE:
TITLE: CHANNEL ESTIMATION FOR OFDM COMMUNICATION SYSTEMS INCLUDING IEEE
802.11A AND EXTENDED RATE SYSTEMS

SERIAL NUMBER: 10068360 FILING DATE: 02/05/2002
PATENT NUMBER: ISSUE DATE:
TITLE: MULTI-ANTENNA WIRELESS RECEIVER CHAIN WITH VECTOR DECODING

SERIAL NUMBER: 10376079 FILING DATE: 02/26/2003
PATENT NUMBER: 7161996 ISSUE DATE: 01/09/2007
TITLE: MULTI-ANTENNA WIRELESS RECEIVER CHAINS WITH VECTOR DECODING

SERIAL NUMBER: 11565479 FILING DATE: 11/30/2006
PATENT NUMBER: ISSUE DATE:
TITLE: MULTI-ANTENNA WIRELESS RECEIVER CHAINS WITH VECTOR DECODING

SERIAL NUMBER: 10143213 FILING DATE: 05/09/2002
PATENT NUMBER: ISSUE DATE:
TITLE: MIMO MODULATION IN A WIRELESS NETWORK WITH AT LEAST ONE DEGENERATE
NODE

SERIAL NUMBER: 10376347 FILING DATE: 02/26/2003
PATENT NUMBER: ISSUE DATE:
TITLE: MIMO MODULATION IN A WIRELESS NETWORK WITH AT LEAST ONE DEGENERATE
NODE

SERIAL NUMBER: 10408015 FILING DATE: 04/03/2003
PATENT NUMBER: ISSUE DATE:
TITLE: SOFT SYMBOL DECODING FOR MIMO COMMUNICATION SYSTEMS WITH REDUCED
SEARCH COMPLEXITY

SERIAL NUMBER: 10643774 FILING DATE: 08/18/2003
PATENT NUMBER: ISSUE DATE:
TITLE: SEARCH-EFFICIENT MIMO TRELLIS DECODER

SERIAL NUMBER: 10643756 FILING DATE: 08/18/2003
PATENT NUMBER: ISSUE DATE:
TITLE: MIMO TCM WITH CONSTELLATION ROTATION AND COORDINATE SWAPPING

SERIAL NUMBER: 10642070 FILING DATE: 08/15/2003
PATENT NUMBER: ISSUE DATE:
TITLE: JOINT PACKET DETECTION IN WIRELESS COMMUNICATION SYSTEM WITH ONE OR
MORE RECEIVER

SERIAL NUMBER: 10643155 FILING DATE: 08/18/2003
PATENT NUMBER: 7127013 ISSUE DATE: 10/24/2006
TITLE: SPACETIME EQUALIZATION IN A WIRELESS RECEIVER

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SERIAL NUMBER: 11469396 FILING DATE: 08/31/2006
PATENT NUMBER: ISSUE DATE:
TITLE: SPACETIME EQUALIZATION IN A WIRELESS RECEIVER

018932/0566 PAGE 3

SERIAL NUMBER: 10643215 FILING DATE: 08/18/2003
PATENT NUMBER: ISSUE DATE:
TITLE: ASYMMETRIC WIRELESS PROTOCOL COMMUNICATIONS

SERIAL NUMBER: 10809559 FILING DATE: 03/24/2004
PATENT NUMBER: ISSUE DATE:
TITLE: ASYMMETRIC WIRELESS PROTOCOL COMMUNICATIONS

SERIAL NUMBER: 10820440 FILING DATE: 04/05/2004
PATENT NUMBER: ISSUE DATE:
TITLE: MODIFIED PREAMBLE STRUCTURE FOR IEEE 802.11A EXTENSIONS TO ALLOW
FOR COEXISTENCE AND INTEROPERABILITY BETWEEN 802.11A DEVICES AND
HIGHER DATA RATE, MIMO OR OTHERWISE EXTENDED DEVICES

SERIAL NUMBER: 11140349 FILING DATE: 05/27/2005
PATENT NUMBER: ISSUE DATE:
TITLE: MODIFIED PREAMBLE STRUCTURE FOR IEEE 802.11A EXTENSIONS TO ALLOW
FOR COEXISTENCE AND INTEROPERABILITY BETWEEN 802.11A DEVICES AND
HIGHER DATA RATE, MIMO OR OTHERWISE EXTENDED DEVICES

SERIAL NUMBER: 11112060 FILING DATE: 04/22/2005
PATENT NUMBER: ISSUE DATE:
TITLE: MIMO RECEIVER USING MAXIMUM LIKELIHOOD DETECTOR IN COMBINATION WITH
QR DECOMPOSITION

SERIAL NUMBER: 11035752 FILING DATE: 01/14/2005
PATENT NUMBER: ISSUE DATE:
TITLE: CENTRALIZED ENROLLMENT AND POLICY CONFIGURATION FOR ACCESS POINTS

SERIAL NUMBER: 11062313 FILING DATE: 02/17/2005
PATENT NUMBER: ISSUE DATE:
TITLE: LOW RATE MIMO

SERIAL NUMBER: 11035753 FILING DATE: 01/14/2005
PATENT NUMBER: ISSUE DATE:
TITLE: RADIO RESOURCE MANAGEMENT FOR WIRELESS LOCAL AREA NETWORKS

SERIAL NUMBER: 11036973 FILING DATE: 01/14/2005
PATENT NUMBER: ISSUE DATE:
TITLE: CAPACITY MANAGEMENT FOR WIRELESS LOCAL AREA NETWORKS

SERIAL NUMBER: 11036184 FILING DATE: 01/14/2005
PATENT NUMBER: ISSUE DATE:
TITLE: SUBSCRIBER MANAGEMENT AND SERVICE PROFILES

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SERIAL NUMBER: 10872120 FILING DATE: 06/17/2004
PATENT NUMBER: ISSUE DATE:
TITLE: HYBRID COORDINATION FUNCTION IMPLEMENTATION

SERIAL NUMBER: 10917595 FILING DATE: 08/12/2004
PATENT NUMBER: ISSUE DATE:
TITLE: WIRELESS MAC LAYER THROUGHPUT IMPROVEMENTS

018932/0566 PAGE 4

SERIAL NUMBER: 11064761 FILING DATE: 02/22/2005
PATENT NUMBER: ISSUE DATE:
TITLE: ADAPTIVE PACKET DETECTION FOR DETECTING PACKETS IN A WIRELESS MEDIUM

SERIAL NUMBER: 11107386 FILING DATE: 04/15/2005
PATENT NUMBER: ISSUE DATE:
TITLE: PACKET CONCATENATION IN WIRELESS NETWORKS

SERIAL NUMBER: 11139925 FILING DATE: 05/27/2005
PATENT NUMBER: ISSUE DATE:
TITLE: DETECTING THE NUMBER OF TRANSMIT ANTENNAS IN WIRELESS COMMUNICATION SYSTEMS

SERIAL NUMBER: 11107603 FILING DATE: 07/21/2005
PATENT NUMBER: ISSUE DATE:
TITLE: PILOT TONES IN A MULTI-TRANSMIT OFDM SYSTEM USABLE TO CAPTURE TRANSMITTER DIVERSITY BENEFITS

SERIAL NUMBER: 11173177 FILING DATE: 07/01/2005
PATENT NUMBER: ISSUE DATE:
TITLE: ADVANCED MIMO INTERLEAVING

SERIAL NUMBER: 11351279 FILING DATE: 02/08/2006
PATENT NUMBER: ISSUE DATE:
TITLE: WIRELESS MESSAGING PREAMBLES ALLOWING FOR BEAMFORMING AND LEGACY DEVICE COEXISTENCE

SERIAL NUMBER: 11371185 FILING DATE: 03/07/2006
PATENT NUMBER: ISSUE DATE:
TITLE: BLOCK ACK PROTOCOLS FOR WIRELESS PACKET NETWORK

SERIAL NUMBER: 11413953 FILING DATE: 04/28/2006
PATENT NUMBER: ISSUE DATE:
TITLE: ENHANCED FRAME AGGREGATION IN A WIRELESS NETWORK SYSTEM

SERIAL NUMBER: 11378612 FILING DATE: 03/18/2006
PATENT NUMBER: ISSUE DATE:
TITLE: EFFICIENT WIRELESS TRANSMISSION OPPORTUNITY HANDOFF

SERIAL NUMBER: 11175971 FILING DATE: 07/05/2005

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PATENT NUMBER: ISSUE DATE:
TITLE: MAC-LEVEL PROTECTION FOR NETWORKING EXTENDED-RANGE AND LEGACY
DEVICES IN A WIRELESS NETWORK

SERIAL NUMBER: 11380116 FILING DATE: 04/25/2006
PATENT NUMBER: ISSUE DATE:
TITLE: DELAY DIVERSITY AND SPATIAL ROTATION SYSTEMS AND METHODS

SERIAL NUMBER: 11414152 FILING DATE: 04/27/2006
PATENT NUMBER: ISSUE DATE:
TITLE: BEAMFORMING TECHNIQUES FOR MIMO COMMUNICATION SYSTEMS

018932/0566 PAGE 5

SERIAL NUMBER: 60868706 FILING DATE: 12/05/2006
PATENT NUMBER: ISSUE DATE:
TITLE: ENHANCED MANAGEMENT FRAME AGGREGATION IN A WIRELESS NETWORK SYSTEM

SERIAL NUMBER: 60869072 FILING DATE: 12/07/2006
PATENT NUMBER: ISSUE DATE:
TITLE: ENHANCED MANAGEMENT FRAME AGGREGATION IN A WIRELESS NETWORK SYSTEM

SERIAL NUMBER: 11531210 FILING DATE: 09/12/2006
PATENT NUMBER: ISSUE DATE:
TITLE: FAST CONTROL MESSAGING MECHANISM FOR USE IN WIRELESS NETWORK
COMMUNICATIONS

SERIAL NUMBER: 60780041 FILING DATE: 03/02/2006
PATENT NUMBER: ISSUE DATE:
TITLE: ADVANCED WIRELESS PACKET TRANSMISSION SCHEME WITH ENHANCEMENTS TO
ACCOMMODATE BASIC WIRELESS PACKET TRANSMISSION SCHEME

SERIAL NUMBER: 60829857 FILING DATE: 10/17/2006
PATENT NUMBER: ISSUE DATE:
TITLE: VCO RINGING CORRECTION IN PACKET-SWITCHED WIRELESS NETWORKS

SERIAL NUMBER: 60883733 FILING DATE: 01/05/2007
PATENT NUMBER: ISSUE DATE:
TITLE: HIGH PERFORMANCE RECEIVER

SERIAL NUMBER: 60883736 FILING DATE: 01/05/2007
PATENT NUMBER: ISSUE DATE:
TITLE: I/Q CALIBRATION FOR WALKING-IF FRONT-END ARCHITECTURES

SERIAL NUMBER: 60883749 FILING DATE: 01/05/2007
PATENT NUMBER: ISSUE DATE:
TITLE: PLL LOOP BANDWIDTH CALIBRATION